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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,091	07/02/2003	Theodore M. Lach III	13822	5805

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EXAMINER

JACKSON, MONIQUE R

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 05/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/612,091

Applicant(s)

LACH ET AL.

Examiner

Monique R Jackson

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/04</u> . | 6) <input type="checkbox"/> Other: ____.  |

Art Unit: 1773

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 19-20 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The sealant material formulated as described in Claim 1 is critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). From the instant disclosure, it appears as if the core of the invention is centered around the sealant composition however Claims 19-20 fail to include the composition in the claimed invention.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1-2, 4, 6-10, and 12-14 recite concentrations in percentages for various components of the sealant material, however the claims do not provide a basis for these percentages wherein it is noted that the term "concentration" is defined as an amount of a specified substance in a unit amount of another substance. Hence, one having ordinary skill in the art would not be reasonably apprised of the scope of the claimed invention and could not interpret the metes and bounds of the claim so as to understand how to avoid infringement particularly since the recited percentages can total more than 100%. Further, a claim in which

Art Unit: 1773

one ingredient is defined so broadly that it reads upon a second does not meet the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Ferm and Boynton*, 162 USPQ (BdPatApp & Int 1969.) In the instant case for example, the first polymer and the hydrocarbon resin read upon each other in Claim 1, the hydrocarbon resin may read upon the second polymer of Claims 2 and 8, the ethylene vinyl acetate copolymer can read upon the ethylene polymer of Claim 8.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-4 and 7-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Knight et al (USPN 4,619,848.) Knight et al teach a composition and method for sealing containers wherein the sealing gasket for the inner surface of the container closure comprises a blend of 55 to 99% ethylene vinyl acetate (EVA) copolymer having a vinyl acetate content of less than 25% and 1 to 50% of polyethylene (PE) (Abstract; Col. 1, lines 37-49) and the composition may further comprise below 25% of a plasticizer such as a hydrocarbon resin, preferably from 5 to up to 15%; below 20% of a slip aid, preferably 1 to 3%; below 10% of non-fusible material such as titanium dioxide, clay or other inorganic pigments or filler, preferably 0.5 to 3% by weight of the organic components; and other minor components, for example antioxidants, below 10%, preferably below 5%, by weight of the organic components (Abstract; Col. 1, lines 36-67; Col. 2, lines 17-35 and 54-58; Col. 2, line 64-Col. 3, line 8.) Knight et al specifically teach that the composition may comprise 50 to 99wt% of said blend of EVA and PE (said blend comprising 50

Art Unit: 1773

to 99% EVA and 1 to 50% PE), 0 to 25% by weight plasticizing resin, 0.2 to 20% by weight slip agent and 0 to 10% by weight non-fusible material (Claim 5), and hence would read upon the instantly claimed percentages wherein EVA is the first polymer and PE is the second polymer.

7. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 4109397 (DE'397.) DE'397 teaches a method of injection molding to encapsulate metal parts with thermoplastic resin wherein a metal part is coated with a heat-activatable adhesive (I), the coating is allowed to dry to a solid, then the adhesive coated metal part is placed into a mold and encapsulated with a thermoplastic resin (II) wherein the adhesive (I) is activated by the temperature and pressure of the injection molding process and the presence of adhesive film (I) produces a firm bond between the metal part and the thermoplastic resin (II). With respect to the limitation "an electrical connector assembly for use in automotive components and assemblies", the Examiner takes the position that the overmolded part taught by DE'397 could function as such and hence reads upon this limitation.

8. Claims 1-5 and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Willett et al (USPN 6,136,398.) Willett et al teach an energy cured sealant composition comprising 10 to 70 weight percent of a curable epoxy resin; an effective amount of a curative for the epoxy resin; 10 to 85 weight percent of a thermoplastic ethylene-vinyl acetate copolymer; and 5 to 60 weight percent of a thermoplastic polyester resin, the parts by weight being based on the total weight of the resin in the composition, wherein the curative is provided in an amount ranging from 0.01 to 10wt% depending upon the type of curative utilized, and wherein the composition may further comprise a hydroxyl containing material in an amount 0-25% by weight of epoxy material, and up to about 50% by volume of the total composition of various additives such as tackifiers,

Art Unit: 1773

plasticizers, and fillers including silica, glass, clay, talc and pigments, and hence reads upon the instantly claimed composition (Abstract; Col. 7, lines 43-57; Col. 8, lines 29-35; Col. 10, lines 38-40; Col. 11, lines 24-27; Col. 11, line 61-Col. 12, line 10; Claims.) Willett et al further teach that the composition may be formed into its desired shape prior to use, such as the shape of a film, and can establish a seal between variety of substrates wherein substrates which can be coated or bonded include plastics and metals (Col. 12, lines 58-26; Col. 14, lines 10-15; Col. 13, lines 37-52.)

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 4109397 (DE'397) in view of Willett et al and in further view of Knight et al or Gerace et al (USPN 5,223,106) or Siadat et al (USPN 4,560,579.) The teachings of DE'397 are discussed above wherein DE'397 teaches the use of a heat activated adhesive to provide an adhesive seal between a metal part and a thermoplastic resin injection molded about the metal part, but do not teach the composition as instantly claimed. However, it is well established in the art that EVA as well as the other components of the instantly claimed composition, including a second polymer material as a plasticizer or blending material, a hydrocarbon resin as a tackifier, mineral fillers such as calcium carbonate, and epoxy resin for improved adhesion, are suitable for use in sealing compositions and heat-activatable adhesives or sealants for metal and/or plastics and provide a

Art Unit: 1773

tight seal between the two components to be adhered or sealed as taught by Willette et al or Knight et al or Gerace et al or Siadat et al, wherein one having ordinary skill in the art at the time of the invention would have been motivated to utilize routine experimentation determine the optimum composition of the disclosed materials to provide the desired sealing and/or adhesive properties for a particular end use wherein the cited prior art teach that the amounts of each are result-effective variables affecting the mechanical and adhesion properties of the final composition.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monique R Jackson whose telephone number is 571-272-1508. The examiner can normally be reached on Mondays-Thursdays, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Monique R Jackson  
Primary Examiner  
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May 16, 2005